

# **Appendix B**

- Further Explanation of Barriers

## Barrier Weighting

The following example provides an illustration of the weighing process:

An interviewee is asked to assign a level of implementation to a change element on a scale of 0 to 4 (see interview sheet - exhibit 3), “not implemented” being 0 to “full implementation” being 4. The interviewee responds “limited implementation” or “1”. Since there was not full implementation, the interviewee is asked to identify barriers to full implementation and assign a total of ten points to the barrier(s). If one barrier is identified, it receives 10 points. If two or more are identified, the 10 points are assigned across the barriers by the interviewee, based on the relative impact of each on failure to fully implement. In this example, the interviewee identifies two barriers, E - which he assigns 6 points, and G - which he assigns 4 points.

Therefore, the overall weight assigned to E and G is as follows:

Implementation Level	Implementation Weight	Points Assigned	Overall weight
0	4		
1	3	to E = 6 to G = 4	E = 18 (3 X 6) G = 12 (3 X 4)
2	2		
3	1		
4	(full implementation)		

The number shown on the slide for each barrier is the average of the overall weights assigned to each barrier when the barrier was identified as impacting full implementation.

## APPENDIX B

### FURTHER EXPLANATION OF BARRIERS

#### A - Insufficient Guidance How to Implement

This barrier was cited frequently when a memo changing a policy was released, but the specifics outlining how to implement the policy were not worked out yet, or the implementation instructions needed additional clarification from the government contracting office or program office. In some cases, it was also used where the policy and implementation instructions were released, but the company lacked sufficient information about the potential impact of the change on their operations and were delaying implementation. Specific examples of this: “Improved Pre-Solicitation phase Communication” or “Streamlined Pre-Award Process”, which have been ongoing for a number of years, but recent changes to FAR Part 15 may impact implementation; “Use of Tailored Negotiation of Forward Pricing Rates”, where implementation was the result of a DoD Process Action team and implementation instructions were limited to DCMC internal documentation; or, “Use of Performance-Based Progress Payments”, where the FAR was changed, but little additional guidance was published.

#### B - Insufficient Funds to Implement

Although not generally cited as a major barrier, this barrier was cited along with “Government Decided Not to Implement” in the “Program Stability” change element. The government decision not to use multiyear contracting on some programs created a situation where there was a lack of funds up front to invest in subcontract and material costs that produce the economies of scale savings related to multiyear contracting. In a few cases, this barrier was cited when new systems had to be put in place and it was questionable if their use would be fully accepted by DoD because of cultural barriers or documented decisions restricting its use. Companies were putting their funds elsewhere until it was clear that DoD would embrace the related change element. Specific examples include “Use of quick (rapid) prototyping in software development” and “Simulation as a Replacement for Some Engineering Tests”, where this was not the primary barrier, but did receive some weight worthy of note.

#### C - Increases Contractor Costs

One of the least cited and lowest weighted barriers, an example where this barrier had a somewhat noteworthy effect was “Use of commercial drawing practices”. In these situations, the contractor advised the government on a particular contract or program, that the government would be better off not including the requirement since the costs would significantly increase with little or no real value to the government. More specifically, there was already a level 3 drawing package in place, and conversion did not seem to sense.

#### D - Increases Contractor Risk

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When applying weight based upon level of implementation, this barrier was the least significant of the eleven. However, there were some change elements where, although not the primary barrier, the impact of this barrier is noteworthy. These change elements generally fall into two categories, the first related to testing, and the second related to cost or pricing and Truth in Negotiations Act (TINA). Specific change elements include: “Survivability/lethality testing below end-item level”; “Concurrent developmental testing (DT)/operational testing (OT)”; “Elimination of non-value added receiving/final inspection and testing”; “Use of commercial and other exemptions for cost or pricing data”; and, “Reduced TINA sweeps”. The citing of this barrier related to these change elements is indicative of the concern for contractor risk related to missing system/product related defects as a result of streamlined testing, or the concern for a DoD defective cost or pricing report resulting from implementation of the related change elements.

#### E - Government Decided Not to Implement

When applying weight to the cited barriers, this ranks number one. This ranking reflects the interviewees feeling that, although “cultural resistance” is a barrier in many cases, a decision by the government is a more substantial barrier to overcome. The difference between this barrier and barrier G “Cultural Resistance” is somewhat subtle. A good example of the two follows: On one program, a level 3, Mil Standard tech drawing package already exists. The new program requirement would include drawings related to the change that this program entails. When asked about the requirement for the drawings, the DoD program office decides that, because of the existence of the current level 3, Mil Standard drawing package, it would make more sense to have the new drawings be to the same standard. This varies from the situation where a program has a drawing requirement, and the Mil Standard is not a requirement. However, as the contractor submits the drawings, the government reviewer continues to require corrections/changes so that, eventually, the drawings look almost exactly like Mil Standard drawings. When making the distinction between this barrier and “cultural resistance” it should be recognized that the difference is not entirely clear. In fact, the decision made related to this barrier could very well have been influenced, to some degree, by cultural resistance on the part of the decision maker or some other person(s) who had influence on the decision. It should also be noted that no effort was made to differentiate between those cases where the government might have indeed made an appropriate business decision not to implement the change from a non-business related decision. It should be added that an effort was made to distinguish between branches of government in those cases where the government was cited as a perceived barrier for failure to implement a multi-year contracting approach (i.e., Congressional approval required). Where Congress was identified, the response was captured in the “other” barrier category.

#### F - Government and Contractor Agreed Not to Implement

This barrier was, by far, not the most frequently cited, but, as with the previous barrier, when assigned weight and implementation level was applied its overall significance became greater. Typically, this barrier was cited when in discussing whether or not to implement a particular change element, the contractor and their DoD counterparts were in agreement that it should not be implemented. The only change element for which this was the primary reason for lack of full implementation was “Elimination of non-value added packaging requirements”. Some examples where it was a significant contributor to lack of full implementation were: “Use of EDI to streamline engineering design and testing” and “Use of performance based progress payments”.

#### G - Cultural Resistance

This was the most frequently cited barrier to full implementation in the survey. Although not specifically stated in the industry survey protocol, the cultural resistance cited was almost always associated with DoD personnel. There were a few cases where the interviewee associated it with both DoD and contractor personnel. Cultural resistance appeared to manifest itself in several ways. First, it was cited in cases where DoD employees were not actively supporting the implementation of a particular change element because of “job security” concerns. Implementation of the change element resulted in elimination of some of their duties, and so they resisted it’s implementation. The second way in which cultural resistance manifested itself was related to what was called “rice bowl issues”, where implementation of a change element would reduce the power or authority of an individual or organization, and resulted in resistance to implementation by that individual or organization. Another manifestation of this was described as lack of knowledge and understanding of the change element and its benefits, and the resultant tendency to resist change when the circumstances concerning the change are not completely known. As discussed previously, this barrier differs from “ Government decided not to implement”, but may be an underlying reason behind some of the formal decisions made by DoD decision makers concerning lack of implementation of a particular change element on a particular contract or program.

#### H - Measure Inconsistent With Established Company Practice

This barrier was the least cited and, when weighed, was not one of the more significant barriers. The only change element where it played a primary role in lack of full implementation was with “Use of commercial engineering drawing practices”, where many interviewees mentioned the cost and time to develop new procedures, the fact that the “people on the shop floor” were used to Mil Std 100, and other comments that questioned its value. Many companies are continuing to use Mil Std 100, since the development of a commercial standard is not complete.

#### I - Proven System Not in Place (Too Early)

This barrier was cited frequently as the primary reason that EC/EDI related change elements were not fully implemented. Automated systems were still being developed, were recently fielded but not in place in all locations, or were up and running but not in place long enough to show results. This barrier was also cited in some cases for recently implemented policy changes.

#### J - Product vs. Process Approach in Place

Many of the acquisition reform change elements are process oriented. During the course of conducting interviews, it was mentioned by several interviewees that, at times, there is a conflict between implementation of a change element and the effect it may have on a particular product or program. Many companies are organized on a matrix structure. Various company processes are integrated to produce products. The degree to which an individual process affects a specific product varies on that product and process, but also on organizational structure and the degree to which it is functionally or programmatically oriented. Implementation of process oriented change elements may be difficult in a company with a strong product oriented structure. Implementation may vary within that environment, from one program to another, or implementation of the change element across the company may be driven by the impact of that change element on one or more key programs in that facility. In many cases where this barrier was cited, it was reported that the change element would not benefit the program and was not implemented, or it would benefit the program, but because of negative/minimal impact for larger, major programs within the company, implementation of the change element was somewhat limited.

#### K - Other

This identifier was used when the interviewee felt that the reason for less than full implementation did not fit one of the preceding. There was a wide variety of reasons given in this area. One mentioned several times was the fact that the program was a “legacy” program, and it didn’t make sense to implement a particular change element in that case.